Chapter 15

Physical activity

Physical inactivity is a term used to identify people who do not get the recommended level of regular physical activity, which is any bodily movement produced by skeletal muscles that results in energy expenditure. Physical activity is one of CDC's leading health indicators. Studies have demonstrated that the more frequent and vigorous the physical activity, the better the health. The U.S. Surgeon General recommends an accumulated 30 minutes of moderate endurance-type physical activity on most, if not all, days of the week to achieve health benefits. Studies have shown that less active, less fit people have double the risk of developing cardiovascular disease, maturity onset diabetes, obesity, and hypertension. Regular physical activity prevents or delays the development of high blood pressure and exercise reduces blood pressure in people with hypertension. Despite increasing evidence of the health benefits of physical activity, the United States remains predominately a sedentary society.

In 1990, nearly 60 percent of the U.S adult population reported little or no leisure-time physical activity. The economic consequences of physical inactivity are enormous. It is felt that a loss of income and productivity occurs when disabling diseases strike. It has been estimated that in 1989 physical inactivity cost the nation $5.7 billion due to increased hospitalizations and other related health care costs.

To determine physical activity status, BRFSS respondents were asked if they had participated in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise during the past month. Those who answer "no" to the question were considered physically inactive. Respondents who answered "yes" to the question were further asked about the type of physical activity or exercise they did most of the time.

Physical inactivity

During 2000, about three out of every ten (29.8%, 95% CI, 27.4% - 32.2%) Lancaster County adults aged 18 years and older reported no engagement in physical exercise in the month prior to the survey.

Prevalence and trend

The overall physical inactivity rate in Lancaster County climbed from 21.7 percent in 1993-1995 to 29.8 percent in 2000 (Fig.117).

Across the survey years, prevalence of physical inactivity did not vary much due to the gender of the respondents. Prior to the 2000 survey both men and women were almost equally likely to be physically inactive during the month prior to the survey. In 2000, more men (31.3%) than women (28.3%) reported being physically inactive (Fig.118).

Fig.117: Trend in Physical Inactivity

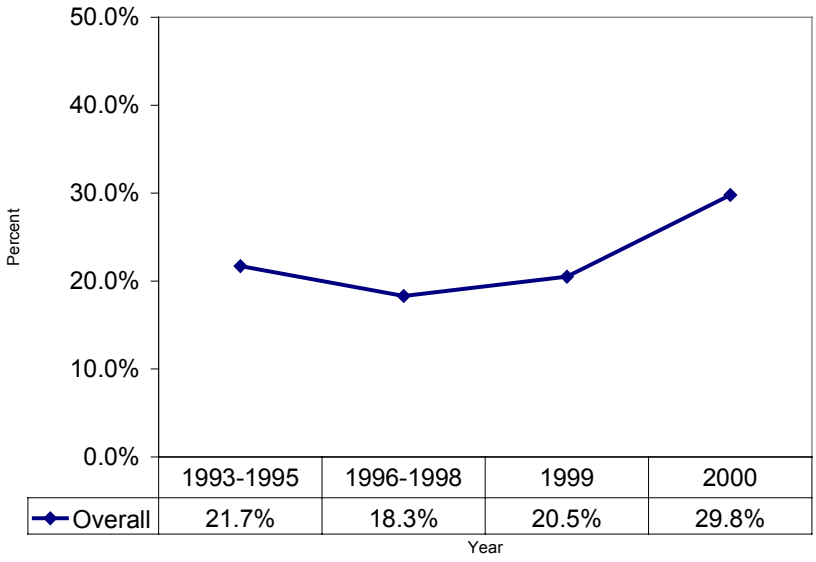
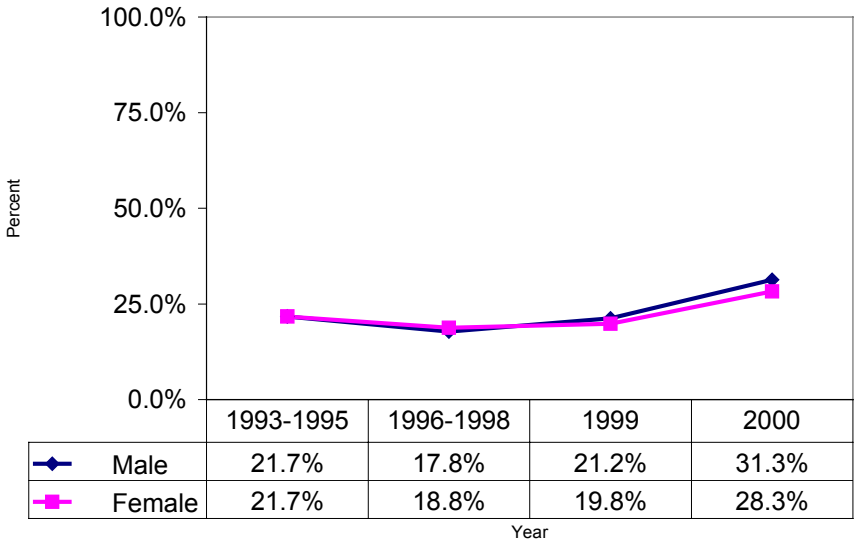
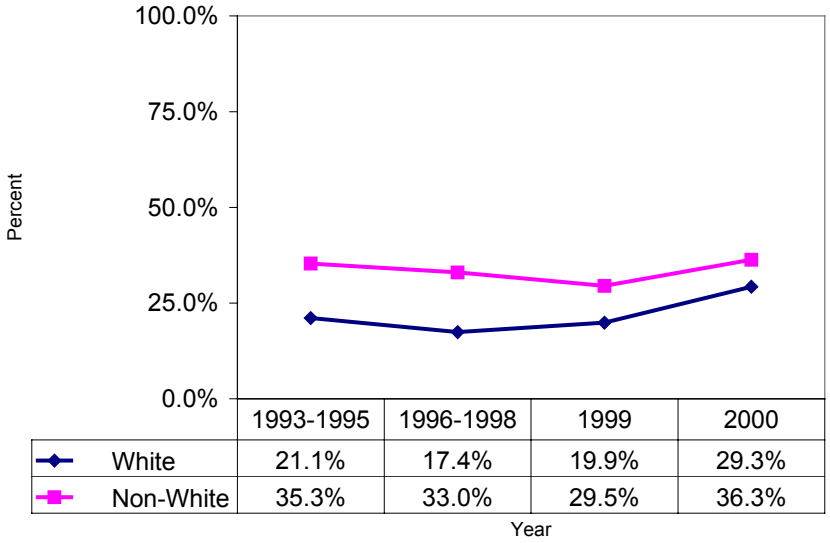


Fig.118: Trend in Pysical Inactivity by Gender



Non-whites have consistently had a higher physical inactivity rate than whites since the 1993-1995 period (Fig.119). In 2000, 36.6 percent of the non-white respondents, compared to 29.3 percent of the white respondents, reported that they had not participated in any kind of physical activity in the last month.

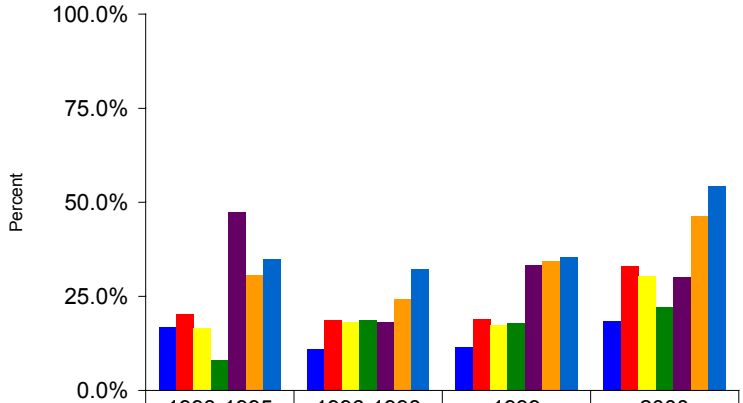
Fig.119: Trend in Physical Inactivity by Race



	1993-1995	1996-1998	1999	2000
White	21.1%	17.4%	19.9%	29.3%
Non-White	35.3%	33.0%	29.5%	36.3%

Increasing age was associated with an increasing number of physically inactive adults in Lancaster County. More than half (54.3%) of the adults belonging in to the age category of 75 years and older did not engage in any kind of physical activity. Similarly, nearly one-fifth of the adults in 18-24 year age group did not engage in physical activities. A sedentary lifestyle was also higher among respondents aged 55-64 years and 65-74 years. A similar correlation between age groups and physical inactivity rates were found in 1993-1995, 1996-1998, and 1999 surveys (Fig.120).

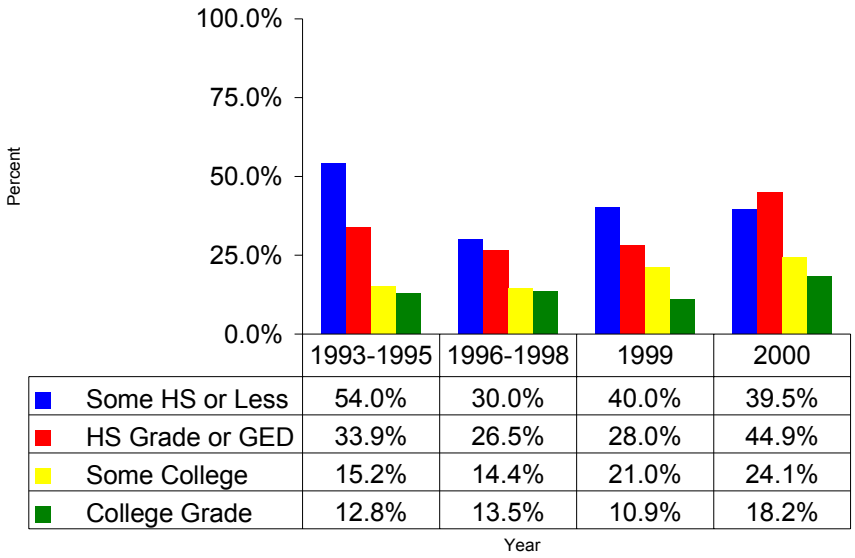
Fig.120: Trend in Physical Inactivity by Age



	1993-1995	1996-1998	1999	2000
18-24	16.9%	11.0%	11.5%	18.5%
25-34	20.3%	18.6%	19.0%	33.0%
35-44	16.5%	18.2%	17.3%	30.3%
45-54	8.1%	18.8%	18.0%	22.1%
55-64	47.4%	18.2%	33.4%	30.2%
65-74	30.8%	24.4%	34.5%	46.4%
75+	34.9%	32.3%	35.4%	54.3%

Figure 121 depicts prevalence of physical inactivity rates among the respondents with different levels of education in different survey years. Adults with less educational attainment appear to be less health conscious than adults with more education. According to the 2000 survey, respondents with "some high school or less" education were more than twice (39.5%) as likely to lead a physically inactive month than respondents with a college education (18.2%).

Fig.121: Trend in Physical Inactivity by Education



In spite of the considerable differences in the rates between the two extreme income groups (income less than $10,000 and income more than $50,000), no apparent physical inactivity trends were observed due to respondent's income (Table 35).

Table 35: Prevalence of Physical Inactivity

Year	**1993-1995**	**1996-1998**	**1999**	**2000**
Annual Household Income				
Less than $10,000	31.6%	4.4%	31.7%	36.6%
$10,000 - $15,000	36.6%	16.2%	38.6%	20.1%
$15,000 - $20,000	20.6%	27.4%	21.4%	19.3%
$20,000 - $25,000	24.8%	32.1%	21.1%	35.7%
$25,000 - $35,000	20.3%	25.8%	13.2%	26.8%
$35,000 - $50,000	7.6%	16.0%	19.0%	29.7%
$50,000+	19.8%	10.2%	10.1%	22.0%

Types of Physical Activity

BRFSS respondents who reported engaging in physical activity in the past month were asked about the types of physical activity or exercise they did. One-third (33.1%) of them indicated "walking" as the most common activity followed by "running" (6.9%). Approximately 2 percent reported " jogging," 1 percent reported "swimming," and the rest indicated other types of activities. "Walking" appeared to be the most widely used type of physical activity regardless of the survey years (Fig.122).

Fig.122: Types of Physical activity

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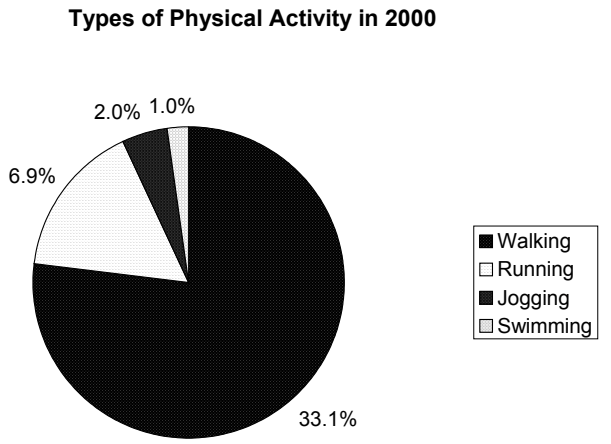
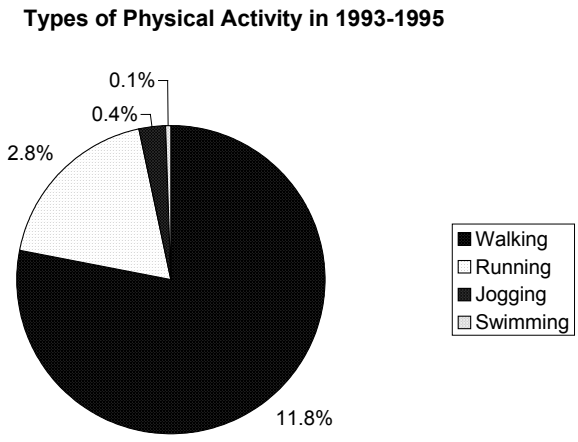
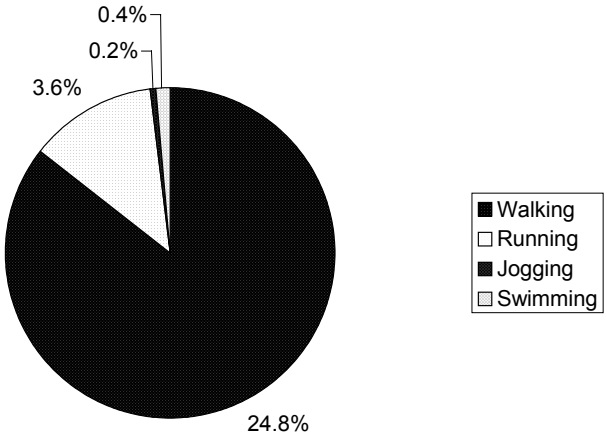




Types of Physical Activity in 1996-1998



Types of Physical Activity in 1999